CLAIMS

I claim:

1. A device for measuring at least one physiological parameter in a body, said device comprising:
    a. an endoprosthesis located within said body, said endoprosthesis defining an inner surface and an outer surface,
    b. a first sensing means adapted for chronic implantation within said body, said first sensing means disposed closer to said outer surface of said endoprosthesis than to said inner surface of said endoprosthesis,
    c. a second sensing means adapted for chronic implantation within said body, said second sensing means disposed closer to said inner surface of said endoprosthesis than to said outer surface of said endoprosthesis,
    d. a means for wireless data transmission,
    e. a power source.
2. The device according to claim **1**, wherein said endoprosthesis is bifurcated.
3. The device according to claim **1**, wherein said physiological parameter is a pressure whereby said second sensing means can be used to compensate for changes in atmospheric pressure.
4. The device according to claim **1**, wherein said first sensing means is attached to said endoprosthesis.
5. The device according to claim **1**, wherein said second sensing means is attached to said endoprosthesis.
6. The device according to claim **1**, wherein said first sensing means is selected from the group consisting of piezoelectric, semiconductor, catheter, acoustic, and ultrasonic sensors.
7. The device according to claim **1**, wherein said second sensing means is selected from the group consisting of piezoelectric, semiconductor, catheter, acoustic, and ultrasonic sensors.
8. The device according to claim **1**, wherein said data processing means is adapted for chronic implantation within said body.

9. The device according to claim **1**, wherein said data processing means is external to said body.
10. A method for measuring a physiological parameter in a body, comprising the steps of:
    a. chronically implanting an endoprosthesis within said body, said endoprosthesis defining an inner surface and an outer surface,
    b. chronically implanting a first sensing means closer to said outer surface than to said inner surface,
    c. chronically implanting a second sensing means closer to said inner surface than to said outer surface,
    d. transmitting data,
    e. providing a power source.
11. The method of claim **10**, wherein said physiological parameter is a pressure.
12. The method of claim **10**, wherein said physiological parameter is a flow velocity.
13. The method of claim **10**, wherein said physiological parameter is a pressure waveform.
14. The method of claim **10**, wherein said first sensing means is selected from the group consisting of piezoelectric, semiconductor, catheter, acoustic, and ultrasonic sensors.
15. The method of claim **10**, wherein said second sensing means is selected from the group consisting of piezoelectric, semiconductor, catheter, acoustic, and ultrasonic sensors.
16. A method for measuring a physiological parameter in a body, comprising the steps of:
    a. chronically implanting a first sensing means within said body,
    b. chronically implanting a second sensing means within said body,
    c. chronically implanting a means for wireless data transmission,
    d. providing a power source,

    whereby a signal can be provided if said physiological parameter reaches a predetermined value.

17. The device according to claim **16**, wherein said first sensing means is selected from the group consisting of piezoelectric, semiconductor, catheter, acoustic, and ultrasonic sensors.
18. The method of claim **16**, wherein said second sensing means is selected from the group consisting of piezoelectric, semiconductor, catheter, acoustic, and ultrasonic sensors.
19. The method of claim **16**, wherein said physiological parameter is a pressure.
20. The method of claim **16**, wherein said physiological parameter is a flow velocity.
21. The method of claim **16**, wherein said physiological parameter is a pressure waveform.